MAKARCHENKO, A.F. [Makarchenko, O.F.]; KOLCHINSKAYA, A.Z. [Kolchyns'ka, A.Z.]

Some results of research on the higher nervous activity in man. Fiziol. zhur. [Ukr.] 7 no.4:443-449 Jl-Ag '61. (MIRA 14:7)

1. Institut fiziologii im. A.A.Bogomol'tsa AN USSR, Kiyev.
(BRAIN)

MAKARCHENKO, A.F. [Makarchenko, O.F.]

A.A.Bogomolets as an outstanding scientist, philosopher, and public man. Fiziol. zhur. [Ukr.] 7 no.3:301-310 My-Je '61. (MIRA 14:5)

1. Institut fiziologii im. A.A.Bogomol'tsa AN USSR, Kiyev.
(BOGOMOLETS, ALEKSANDR ALEKSANDROVICH, 1881-1946)

MAKARCHENKO, A.F., akademik

Scientific views of Academician A.A.Bogomolets and the trend of his works. Vrach. delo no.5:9-15 My '61. (MIRA 14:9)

1. Institut fiziologii imeni A.A.Bogomol'tsa AN USSR. Akademiya nauk USSR.

(BOGOMOLETS, ALEKSANDR ALEKSANDROVICH, 1881-1946)

MAKARCHENKO, A.F., prof.; DINABURG, A.D., prof. (Kiyev)

Role of disturbances of the cortical and subcortical activity in the change in vascular reactions during infectious diseases of the nervous system. Vrach. delo no.2:9-14 F '61. (MIRA 14:3)

1. Institut fiziologii im. A.A.Bogomol'tsa AN USSR. 2. Chlen-korrespondent AN USSR (for Makarchenko).
(NERVOUS SYSTEM--DISEASES) (CEREBRAL CORTEX)

MAKARCHENKO, O.F.

Creative plans of physiologists. Nauka i zhyttia 10 no.1:33 Ja '60. (MIRA 13:6)

1. Chlen-korrespondent AN USSR, direktor Instituta fiziologii im.A.A. Bogomol'tsa AN USSR.
(UKRAINE—PHYSIOLOGY)

MAKARCHENKO, A.F. [Makarchenko, O.F.]; DINABURG, A.D. [Dinaburg, H.D.]

Influenza as an etiological and provoking factor in the development of diseases of the nervous system. Fiziol. zhur. [Ukr.] 6 no. 5:630-642 S-O '60. (MIRA 13:10)

1. Otdel klinicheskoy i eksperimental'noy patologii nervnoy sistemy Instituta fiziologii im. A.A. Bogomol'tsa Akademii nauk USSR.

(NERVOUS SYSTEM--DISEASES) (INFLUENZA)

MAKARCHENKO, A.F. [Makarchenko, O.F.]

The materialistic principle of considering the brain structure as the basis of the theory of the higher nervous activity. Fiziol. zhur. [Ukr.] 6 no. 5:563-570 S-O '60. (MIRA 13:10)

1. Institut fiziologii im. A.A. Bogomol'tsa Akademii nauk USSR, Kiyev.

(CEREBRAL CORTEX)

LUR'YE, Aleksandr Yudimovich, prof., vrach (1897-1958); MAKARCHENKO, A.F., prof., otv. red.; YEVDOKIMOV, A.I., kand. med. nauk, red.; KALINICHENKO, T.Ya., kand. med. nauk, red.; KRUPKO, Yu.A., kand. med. nauk, red.; LOGUNOVA, A.G., kand. med. nauk, red.; PAP, A.G., kand. med. nauk, spets. red.; PANCHENKO, N.I., kand. med. nauk, red.; SAVITSKIY, V.N., doktor med. nauk, prof., red.; SVESHNIKOVA, N.V., kand. med. nauk, red.; TEL'NOVA, R.I., kand. med. nauk, red.; TIMOSHENKO, L.V., kand. med. nauk, spets. red.; YANKELEVICH, Ye.Ya., prof., red.; YANKOVSKAYA, Z.B., red. izd-va; MATVEYCHUK, A.A., tekhn. red.

[Selected works] Izbrannye trudy. Kiev, Izd-vo Akad. nauk USSR. 1960. 425 p. (MIRA 14:7)

1. Chlen-korrespondent Akademii nauk USSR (for Lur'ye, Makarchenko)
(GYNECOLOGY)

MAKARCHENKO, A.F. [Makarchenko, O.F.]

Creative development of physiology. Fiziol.zhur. [Ukr.] 6 no.2: 153-158 Mr-Ap '60. (MIRA 13:7)

1. Direktor Instituta fiziologii im. A.A. Bogomol'tsa AN USSR.
(PHYSIOLOGY)

GOREV, N.N., otv.red.; MAKARCHENKO, A.F., red.; CHERKES, A.I., red.; GUREVICH, M.I., doktor med.nauk, red.; FROL'KIS, V.V., doktor med.nauk, red.; KONDRATOVICH, M.A., kand.med.nauk, red.; SHEZHIN, M.I., red.izd-va; YEFIMOVA, M.I., tekhn.red.

[Problems in the physiology and pathology of coronary circulation] Voprosy fiziologii i patologii koronarnogo krovoobrashcheniia. Kiev, 1960. 149 p. (MIRA 13:7)

1. Akademiya nauk USSR, Kiyev, Institut fiziologii. 2. Deystvitel'nyy chlen AMN SSSR (for Gorev). 3. Chlen-korrespondent AN USSR (for Makarchenko). 4. Chlen-korrespondent AMN SSSR (for Cherkes). 5. Institut fiziologii im. A.A.Bogomol'tsa AN USSR (Kiyev) (for Gurevich). 6. Kiyevskiy meditsinskiy institut im. A.A.Bogomol'tsa (for Frol'kis).

(CORONARY VESSELS)

MAKARCHENKO, A.F., prof.; DINABURG, A.D., prof.

Adenosinetriphosphoric acid in the treatment of infectious diseases of the nervous system. Vrach.delo no.10:1009-1012 O '59.
(MIRA 13:2)

1. Otdel klinicheskoy i eksperimental'noy nevrologii (zaveduyushchiy - chlen-korrespondent AN USSR, prof. A.F. Makarchenko) Instituta fiziologii AN USSR.
(ADENOSINTERIPHOSPHORIC ACID) (NERVOUS SYSTEM--DISEASES)

MAKARCHENKO, O.F.

For human health. Nauka i zhyttia 9 no.5:25-29 My '59.
(MIRA 12:9)

1. Chlen-korrespondent AN USSR; direktor Instituta fiziologii imeni O.O.Bogomol'tsa.
(NEUROPATHOLOGY)

MAKARCHENKO, A.F. [Makarchenko, O.F.]; SIROTINA, M.F. [Syrotina, M.F.]; ZLATIN, R.S.

Changes in the morphological composition of the peripheral blood in dogs of different types of higher nervous activity as affected by long-term external irradiation with small doses of gamma rays (Co^{60}). Fiziol.zhur. [Ukr.] 5 no.6:769-774 N-D '59. (MIRA 13:4)

1. Institut fiziologii im. A.A. Bogomol'tsa Akademii nauk USSR.
(BLOOD--ANALYSIS AND CHEMISTRY) (GAMMA RAYS--PHYSIOLOGICAL EFFECT)

MAKARCHENKO, A.F. [Makarchenko, O.F.]; ROYTRUB, B.A.

Electrophoretic study of serum protein fractions in patients with neural infections. Fiziol.zhur.[Ukr.] 5 no.4:519-528 Jl-Ag '59. (MIRA 12:11)

1. Institut fiziologii im. A.A.Bogomol'tsa AN USSR, otdel eksperimental'noy i klinicheskoy nevrologii.
(BLOOD PROTEINS)
(NEUROSIS)
(PAPER ELECTROPHORESIS)

MAKARCHENKO, A.F. [Makarchenko, O.F.]; ZLATIN, R.S.

Changes in the higher nervous activity of dogs produced by chronic exposure to small doses of ionizing radiation. Fiziol.zhur.[Ukr.] 5 no.1:16-23 Ja-F '59. (MIRA 12:5)

1. Institut fiziologii im. A.A.Bogomol'tsa AN USSR.
(GAMMA RAYS--PHYSIOLOGICAL EFFECT) (CONDITIONED RESPONSE)

MAKARCHENKO, A.F., prof. (Kiyev)

Atomic energy in biology and medicine. Vrach.delo no.3:319-322 Mr '59. (MIRA 12:6)

1. Delegat Vtoroy mezhdunarodnoy konferentsii po mirnomy ispol'zovaniyu atomnoy energii v mirnykh tselyakh, Chlen-korrespondent AN USSR.
(GENEVA--ATOMIC ENERGY--CONGRESSES) (ATOMIC MEDICINE)

MAN'KOVSKIY, Nikita Borisovich, dotsent; MAKARCHENKO, A.F., red.;
GITSHTEYN, A.D., tekhn.red.

[Rheumatic encephalitis] Revmaticheskii entsefalit. Kiev,
Gos.med.izd-vo USSR, 1959. 293 p. (MIRA 13:3)
(RHEUMATIC FEVER) (ENCEPHALITIS)

KOMISSARENKO, V.P., akademik, otv.red.; VALUYEVA, T.K., kand.med.nauk, red.; IVANOV, V.I., akademik, red.; KAVETSKIY, R.Ye., akademik, red.; MAKARCHENKO, A.F., prof., red.; MEDVEDEVA, N.B., red.; FOL'BORT, G.V., akademik, red.; SNEZHIN, M.I., red.izd-va; MILEKHIN, I.D., tekhn.red.

[Mechanism of hormone action] Mekhanizm deistviia gormonov. Pod red. V.P.Komissarenko. Kiev, 1959. 263 p. (MIRA 12:8)

1. Akademiya nauk USSR, Kiyev. Institut fiziologii. 2. AN USSR (for Komissarenko, Ivanov, Kavetskiy, Fol'bort). 3. Chlen-korrespondent AN USSR (for Makarchenko, Medvedeva). 4. Institut fiziologii im. A.A.Bogomol'tsa AN USSR (Kiyev) (for Komissarenko, Valuyeva).

(HORMONES)

MAKARCHENKO, O.F.

Second International Conference on Peaceful Uses of Atomic Energy. Visnyk AN URSR 29 no.12:51-59 D '58. (MIRA 12:1)

1. Chlen-korrespondent AN USSR.
(Geneva--Atomic energy--Congresses)

MAKARCHENKO, A.F. [Makarchenko, O.F.]

Atomic energy in biology and medicine; Second International Conference on Peaceful Use of Atomic Energy. Fiziol. zhur. 4 no.6:849-858 N-D '58. (MIRA 12:3)
(GENEVA--RADIOACTIVE TRACERS--CONGRESSES)

SOV/137-59-1-891

Translation from: Referativnyy zhurnal. Metallurgiya, 1959, p 119 (USSR)

AUTHORS: Vasilenko, Yu.V., Makarchenko, A. F., Khizhnyakova, L. N., Nerubenko, A. B., Protopopova, V. P.

TITLE: Contribution to the Pathology of Chronic Manganese Poisoning of Operators of Electrical Welding Apparatus (K klinike khronicheskoy intoksikatsii margantsem u elektrosvarshchikov)

PERIODICAL: V sb.: Vopr. gigiyeny truda i profzabolevaniy v gornorudn., khim. i mashinostroit. prom-sti, Kiyev. Gosmedizdat UkrSSR, 1958, pp 175-179

ABSTRACT: An account of the results of a study dealing with the effects of Mn on the health of operators of electrical welding equipment during welding operations with coated electrodes containing ferromanganese; the studies were carried out at the Clinic of the Khar'kov Institute on Labor Sanitation and Occupational Diseases. The nature of diseases induced by Mn poisoning is examined together with sanitary measures designed to protect the workers from the toxic effects of the Mn.

V. K.

Card 1/1

MAKARCHENKO, A. F.

BOGOMOLETS, Aleksandr Aleksandrovich; KAVETSKIY, R.Ye., akademik, otv. red.; BOGOMOLETS, O.A., prof., red.; GOREV, N.N., red.; MAKARCHENKO, A.F., red.; MEDVEDEVA, N.B., red.; SIROTININ, N.N., red.; SNEZHIN, M.I., red.izd-va; RAKHLINA, N.P., tekhn. red.

[Selected works in three volumes] Izbrannye trudy v trekh tomakh. Kiev, Izd-vo Akad.nauk USSR. Vol.3. 1958. 358 p. (MIRA 13:1)

1. AN USSR (for Kavetskiy). 2. Deystvitel'nyye chleny AMN SSSR (for Gorev, Sirotinin). 3. Chleny-korrespondenty AN USSR (for Makarchenko, Medvedeva).

(MEDICINE)

MAKARCHENKO, Aleksandr Fedorovich, red.

[Physiology and pathology of respiration, hypoxia and oxygen therapy] Fiziologiia i patologiia dykhaniia, gipoksiia i oksigenoterapiia. Red.kollegiia: A.F.Makarchenko, i dr. Kiyev, Izd-vo Akademii nauk USSR, 1958. 500 p. (MIRA 12:6)

1. Akademiya nauk USSR, Kiyev. Institut fiziologii.
(OXYGEN--THERAPEUTIC USE) (RESPIRATION)

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001031400014-6

BOGOMOLETS, Aleksandr Aleksandrovich; KAVETSKIY, R.Ye., akademik, otv.red.; BOGOMOLETS, O.A., prof., red.; GOREV, N.N., red.; MAKARCHENKO, A.F., red.; MEDVEDEVA, N.B., red.; SIROTININ, N.N., red.; SNEZHIN, M.I., red.izd-va; RAKHLINA, N.P., tekhn.red.

[Selected works in three volumes] Izbrannye trudy v trekh tomakh. Vol.3. Kiev, Izd-vo Akad.nauk USSR, 1958. 358 p. (MIRA 12:4)

1. Akademiya nauk USSR (for Kavetskiy). 2. Deystvitel'nyye chleny AMN SSSR (for Gorev, Sirotinin). 3. Chleny-korrespondenty AN USSR (for Makarchenko, Medvedeva).

(MEDICINE)

FOL'BORT, G.V., akademik, otv.red.; KAVETSKIY, R.Ye., akademik, red.; IVANOV, V.N., akademik, red.; PRIKHOD'KOVA, Ye.K., red.; MAKARCHENKO, A.F., red.; PUTILIN, N.I., doktor med.nauk, red.; SKLYAROV, Ya.P., doktor med.nauk, red.; TORSKAYA, I.V., starshiy nauchnyy sotrudnik, red.; GRUDZINSKAYA, O.S., red.izd-va; YURCHISHIN, V.I., tekhn.red.

[Problems in the physiology of the processes of fatigue and restoration] Voprosy fiziologii protsessov utomleniia i vosstanovleniia. Kiev, 1958. 242 p. (MIRA 11:12)

1. Akademiya nauk Ukrainskoy SSR, Kiev. Institut fiziologii. 2. AN Ukrainskoy SSR (for Fol'bort, Kavetskiy, Ivanov). 3. Chlen-korrespondent AN Ukrainskoy SSR (for Prikhod'kova, Makarchenko). 4. Kiyevskiy meditsinskiy institut, Kafedra normal'noy fiziologii (for Putilin). 5. L'vovskiy meditsinskiy institut, Kafedra normal'noy fiziologii (for Sklyarov).

(FATIGUE)

MAKARCHENKO, O.F.

MAKARCHENKO, O.F.

Creative development of physiological science. Visnyk AN URSR 28 no.8: 3-16 Ag '57. (MIRA 11:1)

(Ukraine--Physiology)

MAKARCHENKO, A F

MAKARCHENKO, A.F., prof. (Kiyev)

Development of Soviet neurologyin the Ukraine. Vrach.delo no.12: 1259-1268 D '57. (MIRA 11:2)

1. Chlen-korrespondent AN USSR
(UKRAINE--NEUROLOGY)

USSR/Human and Animal Physiology - (Normal and Pathological). T
Nervous System. Electroencephalogram of Man.

Abs Jour : Ref Zhur Biol., No 4, 1959, 17945

induction of the cortex on the subcortex. -- K.S. Ratner

Card 3/3

USSR/Human and Animal Physiology - (Normal and Pathological). T
Nervous System. Electroencephalogram of Man.

Abs Jour : Ref Zhur Biol., No 4, 1959, 17945

symptomatology, clear disturbances of closing activity, increase of external inhibition, phase conditions, inertness of stimulation process, frequent development of defensive inhibition were observed. On the EEG, hypersynchronization of low-amplitude desynchronization of alpha-rhythm, slow oscillations; on the plethysmogram, wave-like vascular background and living reaction were observed. The results of a study of skin T^{O} with functional load, of thermoregulating reflex, and pharmacodynamic cutaneo-vascular tests corresponded to the data of investigation of higher nervous activity and EEG. Apparently, in influenzal neuroinfection, primarily sub-cortical regions of the brain suffer; in neuroinfection of non-influenzal etiology, primary and hardest hit are cortical neurons; disturbances of activity of subcortical regions develop secondarily and are conditioned by positive

Card 2/3

USSR/Human and Animal Physiology - (Normal and Pathological). T
Nervous System. Electroencephalogram of Man.

Abs Jour : Ref Zhur Biol., No 4, 1959, 17945

Author : Makarchenko, O.F.
Inst : -
Title : Cortical-Subcortical Relationships in Virus Neuro-Infections.

Orig Pub : Fiziol. zh., 1957, 3, No 5, 45-64

Abstract : In patients with influenzal neuroinfection, insignificant disturbances of conditioned-motor reactions were discovered; the electric activity of the brain was decreased in these patients; alpha-rhythm was almost absent; small waves with a frequency of 15-18 osc./sec. were observed; beta-rhythm was somewhat increased. On the plethysmogram, hypo- and areactivity of vessels were determined. In virus neuroinfections of non-influenzal etiology, along with an expressed general cerebral

Card 1/3

MAKARCHENKO, O.F.

MAKARCHENKO, O.F.

For creative development of the science of physiology. Fiziol. zhur. [Ukr.] 3 no.5:3-17 S-O '57. (MIRA 11:1)
(PHYSIOLOGY)

KAVETSKIY, Rostislav Yevgeniyevich [Kavets'kyi, R.IE.]; BALITSKIY, Konstantin Petrovich [Balyts'kyi, K.P.]; MAKARCHENKO, A.F., prof., otv.red.; NERUSH, G.I. [Nerush, H.I.], red.izd-va; SIVACHENKO, Ye.K. [Sivachenko, IE.K.], tekhn.red.

[Contribution of scientists of the Academy of Sciences of the Ukrainian S.S.R. to the development of medicine] Vklad uchenykh Akademii nauk Ukrains'koi RSR v rozvytok medytsyny. Kyiv, Vyd-vo Akad.nauk URSR, 1957. 103 p. (MIRA 13:7)

1. Chlen-korrespondent AN USSR (for Makarchenko).
(MEDICINE) (ACADEMY OF SCIENCES OF THE UKRAINIAN S.S.R.)

BOGOMOLETS, Aleksandr Aleksandrovich; KAVETSKIY, P.Ye., otvetstvennyy red.; BOGOMOLETS, O.A., prof., red.; GOREV, N.N., red.; MAKARCHENKO, A.F., red.; MEDVEDEVA, N.B., red.; SIROTININ, N.N., red.; SNEZHIN, M.I., red. izd-va; RAKHLINA, N.P., tekhn. red.

[Selected works in three volumes] Izbrannye trudy v trekh tomakh. Kiev, Izd-vo Akad. nauk USSR. Vol.2. 1957. 477 p. (MIRA 11:10)

1. Deystvitel'nyy chlen Akademii meditsinskikh nauk SSSR (for Gorev, Sirotinin). 2. Deystvitel'nyy chlen Akademii USSR (for Kavetskiy). 3. Chlen-korrespondent Akademii nauk USSR (for Makarchenko, Medvedeva).

(PHYSIOLOGY, PATHOLOGICAL)

MAKARCHENKO, A.F.

CHAGOVETS, Vasiliy Yuri'yevich; BABSKIY, Ye.B., akademik, otvetstvennyy redaktor; KAVETSKIY, R.Ye., akademik, redaktor; KOLPAKOV, Ye.V., professor, redaktor; MAKARCHENKO, A.F., redaktor; FOL'BORT, Yu.V., akademik, redaktor; SHEZHIN, M.I., redaktor izdatel'stva; KOLOMIYCHUK, V.A., tekhnicheskiy redaktor.

[Selected works; in one volume] Izbrannye trudy; v odnom tome. Kiev, Izd-vo Akad.nauk USSR, 1957. 513 p. (MIRA 10:11)

1. Akademiya nauk USSR (for Babskiy, Kavetskiy, Fol'bort).
2. Chlen-korrespondent Akademii nauk USSR (for Makarchenko).
(Electrophysiology)

"In experiments on dogs, symptoms of disturbed conditioned reflex activity appeared at the early stage of the development of intoxication when disturbances in the somatic sphere [disruption of the inhibition and stimulation processes and prolongation of the latent period] had not as yet developed. The further development of intoxication was characterized by phase stages, which indicated a serious disruption of the cerebral cortex processes. An almost complete restoration of conditioned reflex activity in dogs was achieved by a rest from intoxication. The author came to the conclusion that, in the pathogenesis of manganese intoxication, the disruption of the inhibition and stimulation processes in the cerebral cortex and the development of diffuse inhibition [protective type] play an important role."

Sum 1258

MAKARCHENKO, A. F.

"Characteristic of Higher Nervous Activity in Manganese Intoxication [in the Clinic and in Experiments], by A. F. Makarchenko, Vysshaya Nervnaya Deyatel'nost' i Kortiko-Vistseral'nyye Vzaimootnosheniya v Norme i Patologii (Higher Nervous Activity and Normal and Pathological Cortico-Visceral Relationships), Kiev, 1955, pp 47-55 (from Sovetskoye Meditsinskoye Referativnoye Obozreniye, Moscow, No 28, 1956, abstract by A. Gurvich, p 149)

"A characterization of the modifications of higher nervous activity caused by manganese intoxication based on the study of a clinical picture and on experiments on animals is provided in the work. The early symptoms of the affection of the nervous system caused by manganese intoxication are emphasized in the clinical picture. Symptoms of damage to the central and peripheral nervous systems were noted in parkinsonism, which is the basic syndrome of the intoxication. In many cases of manganese intoxication the study revealed characteristic changes in the electroencephalogram, the degree of the changes depending on the depth of the intoxication. The appearance of delta-type waves, slowly fluctuating between two to four per second, was observed. Various type changes of the alpha-rhythm, i.e., diminution or complete disappearance of alpha-waves, irregularity of alpha-rhythm, and the frequent reappearance of small groups of alpha-waves after a period of complete absense, were noted.

MAKARCHENKO A.F.

"Chemical Factors of Nervous Irritation in the Blood and Spinal Cord Fluid in Manganese Intoxication," by A. F. Makarchenko, VIII Vsesoyuznyy S'yezd Fiziologov, Biokhimikov, Farmakologov (VIII All-Union Session of Physiologists, Biochemists, and Pharmacologists), Moscow, 1955, 394-395, (from Sovetskoye Meditsinskoye Referativnoye Obozreniye, Normal'naya i Patologicheskaya Fiziologiya, Biokhimiya, Farmakologiya i Toksikologiya, No 27, 1956, abstract by F. Meyerson, p 125

"The author established that a sharp rise in the activity of acetylcholine in the blood occurred in patients with expressed symptoms of affection of the central nervous system (parkinsonism syndrome) caused by manganese intoxication. Fluctuations of the cholinesterase enzyme in most of the patients of this group were within the normal limits, and only in individual cases was there a rise in the activity of cholinesterase. In the initial stages of manganese intoxication the rise in acetylcholine activity was not intensely pronounced. Systematic investigation of the content of acetylcholine and cholinesterase in the blood of dogs during the first month of chronic manganese intoxication revealed a rise of acetylcholine content in the blood of only one dog out of 14 which were poisoned. Beginning with the third or fourth month of daily intoxication by manganese the quantity of acetylcholine in the blood began to rise while the activity of cholinesterase simultaneously began to decline. It is the author's opinion that manganese has a harmful effect on the cortex and subcortex and disturbs the metabolism of the mediators of nervous irritation." (U)

Sum. 1374

MAKARCHENKO, A.F.

A.M.Vorob'ev; obituary. Zhur.vys.nerv.deiat. 6 no.1:182-183 Ja-F' 56. (MLRA 9:7)
(VOROB'EV, ANATOLII MARKOVICH, d.1955)

MAKARCHENKO, A.F.; GORBACH, N.L.

Bioelectrical activity of the cerebral cortex in infectious diseases of the nervous system. Fiziol.zhur. [Ukr.] 2 no.5:26-34 S-O '56. (MLRA 10:1)

1. Institut fiziologii imeni O.O.Bogomol'tsya Akademii nauk URSR.
(ELECTROPHYSIOLOGY) (CEREBRAL CORTEX)
(NERVOUS SYSTEM--DISEASES)

MAKARCHENKO, A.F.

changes in chronaxy caused by manganese intoxication. Fiziol.zhur. (Ukr.) 2 no.3:68-77 My-Je '56. (MIRA 9:10)

1. Institut fiziologii imeni O.O.Bogomol'tsya Akademii nauk URSR, viddil klinichnoi ta yeksperimental'noi nevrologii.
(CHRONAXIA) (MANGANESE--TOXICOLOGY)

BOGOMOLETS, Aleksandr Aleksandrovich, akademik, Geroy Sotsialisticheskogo Truda; GOREV, N.N., redaktor; KAVETSKIY, R.Ye., otvetstvennyy redaktor; MAKARCHENKO, A.F., professor, redaktor; MEDVEDEVA, N.B., redaktor; SIROTININ, N.N., redaktor; SNEZHIN, M.I., redaktor izdatel'stva; RAKHLINA, N.P., tekhnicheskiy redaktor

[Selected works in three volumes] Izbrannye trudy; v trekh tomakh. Kiev, Izd-vo Akademii nauk USSR. Vol. 1. 1956. 282 p. (MLRA 9:10)

1. Deystvitel'nyy chlen AMN SSSR (for Gorev) 2. Deystvitel'nyy chlen AN USSR (for Kavetskiy). 3. Chlen-korrespondent AN USSR (for Medvedeva, Sirotinin)
(PHYSIOLOGY, PATHOLOGICAL)

MAKARCHENKO, Aleksandr Fedorovich, professor; FOL'BORT, G.V., professor, akademik, otvetstvennyy redaktor; SNEZHIN, M.I., redaktor izdatel'stva; RAKHLINA, N.P., tekhnicheskiy redaktor

[Modifications of the nervous system in manganese poisoning] Izmeneniia nervnoi sistemy pri intoksikatsii margantsem. Kiev, Izd-vo Akademii nauk USSR, 1956. 317 p. (MIRA 9:10)

1. Akademiya nauk USSR (for Fol'bort)
(MANGANESE--TOXICOLOGY) (NERVOUS SYSTEM--DISEASES)

MAKARCHENKO, O.F.

For further creative development of physiology in the Ukraine.
Visnyk AN URSR 26 no.5:3-9 My '55. (MLRA 8:8)
(Ukraine--Physiology)

MAKARCHENKO, A.F.(Kiyev)

Eighth Congress of the All-Union Society of Physiologists, Biochemists, and Pharmacologists. Zhur.vyssh.nevr. deiat. 5 no.4:600-608 Jl-Ag '55 (MLRA 8:11)
(PHYSIOLOGY--SOCIETIES)

MAKARCHENKO, O.F.; KOLCHINS'KA, A.Z.

At the Eighth Congress of the All-Union Society of Physiologists, Biochemists, and Pharmacologists. Fiziol. zhur. (Ukr.) 1 no.3: 131-143 My-Je '55. (MLRA 9:9)
(PHYSIOLOGY--CONGRESSES)

MAKARCHENKO, A.F.

VOROB'YEV,A.M., professor, redaktor; GOREV,N.N., redaktor; KAVETSKIY,R.Ye., redaktor; MAKARCHENKO,A.F., professor, redaktor; PROTOPOPOV,V.P., redaktor; SIROTININ,N.N., professor, redaktor; FOL'BORT,G.V., redaktor; POLEVOY,S.V., redaktor; KRYLOVSKAYA,N.S., tekhnicheskiy redaktor

[Higher nervous activity and cortical-visceral interrelations in normal and pathdogical states] Vysshaia nervnaia deiatel'nost' i kortiko-vistseral'nye vzaimootnosheniia v norme i patologii. Kiev, Izd-vo Akademii nauk Ukrainskoi SSR, 1955. 271 p. (MLRA 9:2)

1. Akademiya nauk URSR, Kiyev. Instytut fiziologii.2. Chlen-korrespondent AN USSR (for Vorob'yev, Sirotin) 3. Deystvitel'nyy chlen AMN SSSR for Gorev) 4. Deystvitel'nyy chlen AN USSR (for Kavetskiy, Protopopov, Fol'berg) (NERVOUS SYSTEM)

MAKARCHENKO, O.F.

Sleep therapy for sequelae of manganese intoxication. Medych. zhur.24 no.2:59-71 '54. (MLRA 8:10)

1. Ukrains'kiy psikhonevrologichniy institut.
(POISONING, manganese, sleep ther.)
(SLEEP, therapeutic use, manganese pois.)
(MANGANESE, poisoning, ther.,sleep)

MAKARCHENKO, A.F.

Changes in the nervous system in manganese poisoning. Vop. fiziol. no.10:26-43 '54 (MLRA 10:5)

1. Institut fiziologii im. A.A. Bogomol'tsa Akademii nauk USSR.
(MANGANESE--TOXICOLOGY) (NERVOUS SYSTEM--DISEASES)

MAKARCHENKO, A. F.

Dissertation: "Changes in the Nervous System and Characteristics of Higher Nervous Activity in Manganese Poisoning in Clinic and Experiment." Dr Med Sci, Ukrainian Institute for the Advanced Training of Physicians, Khar'kov, 1954. (Referativnyy Zhurnal-Khimiya, no 10, Moscow, May 54)

SO: SUM 318, 23 Dec 1954

MAKARCHENKO, A.F.

Effect of manganese on the higher nervous function in dogs.
Vopr.fiziol. no.9:33-51 '54. (MIRA 14:1)

1. Ukrainskiy psikhonevrologicheskiy institut g. Khar'kov.
(MANGANESE, effects,
on higher nervous funct. in dogs)
(CENTRAL NERVOUS SYSTEM, effect of drugs on
manganese, higher nervous funct. changes
in dogs.)

MAKARCHENKO, A. F.

Nerves

Serological characteristic of antigenic properties of nerve tissue.
Medych. zhur. 20, No. 6, 1951.

9. Monthly List of Russian Accessions, Library of Congress, August 1952. UNCLASSIFIED.

MAKARCHENKO, A. F.

Acting Minister, Min. Public Health, Ukrainian SSR, -c1948-.

Public Health.

"Initial Results of the Union of Factory Dispensaries and Polyclinics in the Ukraine,"

SO: Sov. Med., No. 5, 1948.

MAKARAYTES, G. B.

USSR/Cultivated Plants - Fodders.

Abs Jour : Ref Zhur - Biol., No 9, 1958, 39870

Author : Makarayte, G. B.

Inst :

Title : Lupine on Sandy Soils.

Ori ; Pub : Sbor. nauch. rabot, 1957, No 4, 31-33

Abstract : The yields of lupine fresh ass on non-fertil. coarse-grained sandy soils depends basically on the precipitation according to the data obtained by the Voronskiy experimental station in 1936-19[illegible]. The best yields are obtained by sowing pure lupine. It is recommended to sow lupine for green feed purposes during the blossoming period. For silage the sowing should take place during the [illegible] bean formation. -- M.A. Rabinovskiy

Card 1/1

MAKARAYTIS, B.B. Cand Agr Sci -- (diss) "~~Questions~~ Problems of ~~agrotechnology~~ Agr engineering of field crops on sandy soils of the south-eastern part of Lithuania. (According to data of the Varena ~~Experimental~~ Experimental Station)"

Kaunas, 1957. 19 pp 23 cm. (Min of Agr USSR. Lithuanian Agr Acad.)

150 copies. (KL, 23-57, 115)

MOLNAR, Zoltan, dr.; MAKACS, Gyorgy

One of the aspects of developing thermal [illegible]
no.9:153-159 D '[illegible]

MAKARA, Gyorgy, dr., csoportvezeto-foorvos

Is gesarol detrimental to the human organism? Elet tud 18 no.43:1366 27 O '63.

1. Budapesti Fovarosi Kozegeszsegugyi-Jarvanyugyi Allomas.

L 43639-66 RO

ACC NR: AT6032344 SOURCE CODE: HU/2505/65/027/001/0021/0025

19
B+1

AUTHOR: Makara, Gabor; Csalay, Laszlo; Frenkl, Robert; Somfai, Zsuzsa

ORG: Institute of Medical Research, MTA, Budapest (MTA Kiserleti Orvostudomanyi Kutato Intezet); Institute of Pathophysiology, Medical University of Budapest, Budapest (Budapesti Orvostudomanyi Egyetem, Korelettani Intezet)

TITLE: Effects of serotonin following desensitization with capsaicin

SOURCE: Academia scientiarum hungaricae. Acta physiologica, v. 27, no. 1, 1965, 21-25

TOPIC TAGS: serotonin, body temperature, pharmacology

ABSTRACT: On desensitization with capsaicin, the body temperature-lowering, antidiuretic and local edematogenous actions of a low dose of serotonin are diminished while the temperature-lowering and ulcerogenic effects of a high dose of it remain unchanged. Orig. art. has: 5 figures. [Orig. art. in Eng.] [JPRS]

SUB CODE: 06 / SUBM DATE: 15Nov63 / ORIG REF: 002 / OTH REF: 010

Card 1/1 45

0919 2396

HUNGARY

PAPP, Miklos, Dr; MAKARA, Gabor, Dr; VARGA, Bertalan, Dr; Hungarian Academy of Sciences, Experimental Research Institute of Medicine (director: RUSZNYAK, Istvan, Dr) (Magyar Tudomanyos Akademia, Kiserleti Orvostudomanyi Kutato Intezet) Budapest.

"Effect of Bradykinin, Kallidin, Serotonin and Histamine on Pancreatic Blood Flow."

Budapest, Orvosi Hetilap, Vol 107, No 37, 11 Sep 66, pages 1745-1747.

Abstract: [Authors' Hungarian summary] The inflammation-producing compounds bradykinin and kallicin as well as serotonin, when injected into the pancreatic arteries even in small amounts, will increase the pancreatic blood flow in dogs. The injection of larger amounts of bradykin, kallidin and histamine into the thoracic aorta produces the same effect. All 20 references are Western.

1/1

MAKARA, G.; OSALAY, L.; FRENKL, R.; SOMFAI, Zsuzsa

The effects of serotonin following desensitization with cephalin.
Acta physiol. Acad. sci. Hung. 27 no.1:21-25 '65

1. Institute of Pathophysiology, University Medical School, Budapest.

MAKARA, G.B.; CSALAY, L.; FINKEL, R.; SOMFAI, Ysuzsa; SZENTESHAZI, K.

Effect of capsaicin on experimental ulcer in the rat. Acta med. acad. sci. Hung. 21 no.2:213-216 '65.

1. Pathophysiological Institute, University Medical School, Budapest, and Research Institute of Experimental Medicine, Hungarian Academy of Sciences, Budapest. Submitted January 15, 1965.

L 9764-66

ACC NR: AP6001957 SOURCE CODE: HU/0018/65/017/001/0074/0076

AUTHOR: Makara, Gabor; Frenkl, Robert; Csalay, Laszlo--Chalai, L.

ORG: Institute of Pathophysiology, Medical University of Budapest, Budapest (Budapesti Orvostudomanyi Egyetem Korelettani Intezete)

TITLE: Correlation between the development of ulcer and histamine content of the gastic secretion in rats

SOURCE: Kiserletes Orvostudomany, v. 17, no. 1, 1965, 74-76

TOPIC TAGS: histamine, biologic secretion, biochemistry, endocrinology, pathology, gastroenterology, digestive system disease

ABSTRACT: In cases of anaphylactoid ulcer in rats, the histamine content and concentration of the gastric juice in stomachs with eroded walls is lower than in those with intact walls. The phenomenon may be caused by a rediffusion of the liberated histamine. Ildiko Sasvari served as technical assistant for this work. Orig. art. has: 2 figures. [JPRS]

SUB CODE: 06 / SUBM DATE: 24May64 / ORIG REF: 002 / OTH REF: 006

Card 1/1

L 1989-66

ACCESSION NR: AT5024298

ASSOCIATION: Institute of Pathophysiology, University Medical School, Budapest

SUBMITTED: 00	ENCL: 00	SUB CODE: LS
NR REF SOV: 000	OTHER: 008	JPRS

Card 2/2 DP

L 1989-66

ACCESSION NR: AT5024298 HU/2505/64/025/002/0199/0202

AUTHOR: Frenkl, Robert; Csalay, Laszlo; Makara, Gabor; Somfai, Zsuzsa 17 B+1

TITLE: Effect of regular muscle activity on the histamine sensitivity of the rat

SOURCE: Academia scientiarum hungaricae. Acta physiologica, v. 25, no. 2, 1964, 199-202

TOPIC TAGS: rat, muscle physiology, myology, animal physiology, biochemistry

ABSTRACT: Rats forced to swim regularly showed a decreased histamine sensitivity from the ninth day on. The decrease in the acid secretion by the stomach, observed in previous experiments to appear in the ninth week of regular swimming, may be due only in part to a change in histamine sensitivity. The change in the reaction of animals in training can not be considered to be due to a general change in systemic reactivity because the effect of carbaminoylcholine was the same in both groups. "The authors are gratefully indebted to Miss X. Oltvanyi for technical assistance." Orig. art. has: 4 graphs.

Card 1/2

FRENKL, R.; CSALAY, L.; MAKARA, G.; HARMOS, G.

Antiulceropeptic effect of exercise in rats. Acta physiol. Acad. sci. Hung. 25 no.1:97-100 '64.

1. Institute of Pathophysiology, University Medical School, Budapest and Hungarian School of Physical Training, Budapest.

FRENKL, Robert; CSALAY, Laszlo; MAKARA, Gabor; SOMFAI, Zsuzsa; SELMECI, Laszlo;
Technikai asszisztens: OLIVANYI, Nenia

Effect of systematic muscular activity on the serotonin sensitivity in rats. Kiserl. orvostud. 16 no.4:391-393 Ag '64.

1. Budapesti Orvostudomanyi Egyetem Korelettani Intezete.

HUNGARY

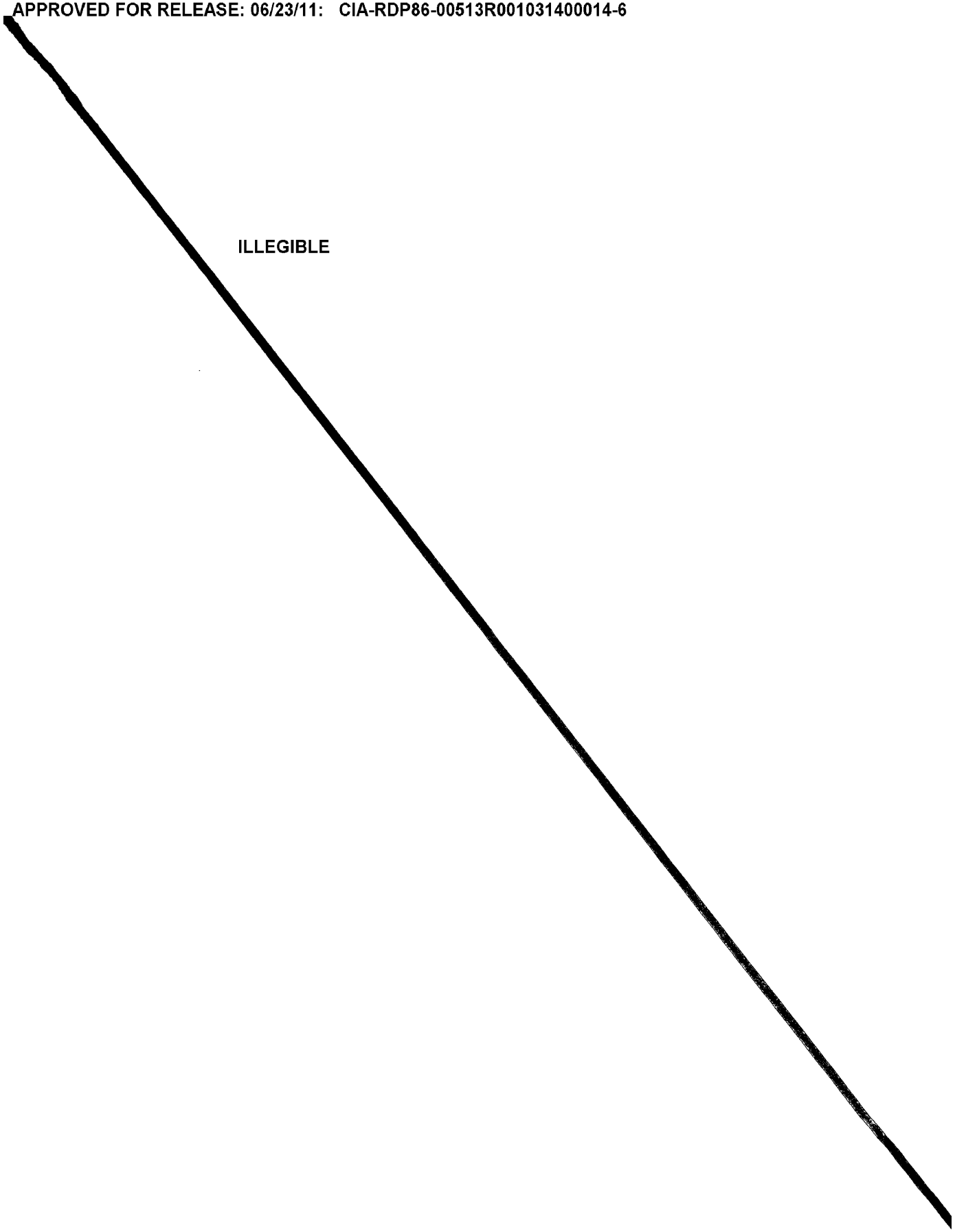
CSALAY, L., FRENKL, R., MAKARA, G., HEGYVARI, C., and KEMENY, T., of the Institute of Pathophysiology, Medical University, Budapest [Original version not given].

"Correlation Between Adrenal Activity and Experimental Cardiopathy"

Budapest, Acta Physiologica Academiae Scientiarum Hungaricae, Supplement to Vol 22, 1963; pp 13-14.

Abstract [Authors' English summary, modified]: The correlation between experimental cardiopathy and adrenal activity, the role of the adrenals in the genesis of the cardiac lesion produced by the cardiopathogenic diet has been investigated. Rats subjected to adrenalectomy and treated with prednisone developed grave liver lesion prior to the appearance of myocardial lesions in response to the cardiopathogenic diet. Chronic ACTH treatment caused aggravation of the cardiopathy and brought about hepatic lesions. The effects of the salt composition of the diet, increased protein, fat and vitamin D_2 intake were also investigated.

ILLEGIBLE



L 07434-67

ACC NR: AP6030266 O

nickel in the Cu-Ni alloys increases sharply as the cooling rate is accelerated reaching a maximum at comparatively low cooling rates (about 1-3°C/sec) where it remains constant with a further increase in cooling rate. The development of chemical micrononhomogeniety (dendrite liquation) during crystallization changes the composition of interdendrite boundaries and the temperature range of alloy crystallization. This should have a corresponding effect on the technological properties of the alloy in this range. These data may be used for explaining the connection between the type of phase diagram and the resistance of the alloy to the formation of hot cracks. The composition of the dendrite axes in aluminum-zinc alloy is determined by the equilibrium solidus point and is independent of cooling rate over a wide range. Orig. art. has: 4 figures, 1 table.

SUB CODE: 11/ SUBM DATE: 16Mar66/ ORIG REF: 014/ OTH REF: 002

Card 2/2

L 07434-67 EWT(m)/EWP(t)/ETI IJP(c) JH/JD/HW

ACC NR: AP6030266 (N) SOURCE CODE: UR/0125/66/000/008/0006/0009

41
B

AUTHOR: Makara, A. M.; Dzykovich, I. Ya.; Gordan', G. N.; Mosendz, N. A.

ORG: Institute of Electric Welding im. Ye. O. Paton, AN UkrSSR (Institut elektrosvarki AN UkrSSR)

TITLE: Chemical micrononhomogeniety of cast alloys as a function of cooling rate

SOURCE: Avtomaticheskaya svarka, no. 8, 1966, 6-9

TOPIC TAGS: cast alloy, aluminum base alloy, copper base alloy, zinc containing alloy, nickel containing alloy, cooling rate, metal crystallization

ABSTRACT: Local x-ray spectral analysis is used for studying the effect of cooling rate on the degree of liquation of alloying elements in aluminum-zinc (15 wt.% Zn) and copper-nickel (15 wt.% Ni) alloys. The alloys were melted from 99.99% pure components in alundum and steel crucibles 20 mm in diameter and 30 mm high. The difference in cooling rates was produced by using cold water, air or by furnace cooling. Some of the copper-nickel alloys were also poured into tapered water-cooled molds to obtain intermediate cooling rates. The cooling curves showed a pronounced inflection point corresponding as a rule to the equilibrium liquidus temperature. This temperature was taken as the end of crystallization on curves where this point was not fixed. The experimental data show that the degree of liquation of zinc in the Al-Zn alloys and of

Card 1/2 UDC: 621.791;620.192.4

L 24457-66
ACC NR: AP6012277 8

elements in the weld seams is considerably dependent on carbon concentration, nature of the impurity element and the system used for alloying. The degree of molybdenum liquation increases rapidly with carbon concentration, tungsten shows somewhat less dependence, while the liquation of chromium, silicon, manganese, and nickel is affected only slightly by an increase in carbon content. Molybdenum and vanadium liquate out much more readily than chromium, silicon and manganese; nickel is not segregated in this manner at all in many cases. Further studies are needed on the development of chemical microheterogeneity in weld seams as a function of crystallization conditions, concentration and nature of impurity elements and alloying systems. Orig. art. has: 3 figures, 3 tables.

SUB CODE: 11,13/ SUBM DATE: 13Apr65/ ORIG REF: 008/ OTH REF: 002

Card 2/2 dda

L 24457-66 EWT(m)/EWP(v)/T/EWP(t)/EWP(k) IJP(c) JD/HW/HW/JG
ACC NR: AP6012277 (N) SOURCE CODE: UR/0125/65/000/011/0005/0011

55
47
13

AUTHOR: Makara, A. M.; Dzykovich, I. Ya.; Mosendz, N. A.; Gordan', G. N.

ORG: Institute of Electric Welding im. Ye. O. Paton, AN UkrSSR (Institut elektrosvarki AN UkrSSR)

TITLE: Investigation of microscopic chemical heterogeneity in weld joints

18 18

SOURCE: Avtomaticheskaya svarka, no. 11, 1965, 5-11

TOPIC TAGS: welding, x ray analysis, alloy steel, weld evaluation, cooling rate, high strength steel, seam welding

ABSTRACT: Localized x-ray analysis is used for studying the effect of cooling rate on the degree of chemical nonhomogeneity in welded seams of high-strength steel as a function of the content of basic alloying elements (silicon, manganese, chromium, nickel, molybdenum and tungsten) and also for determining the relationship between this nonhomogeneity and the concentration of carbon in the seam, as well as the content of carbon combined with alloying elements. Electroslag, electric arc and electron beam methods were used to give a wide range of cooling rates. Welded specimens of KhGSN, Kh2GSNVM and Kh3M were studied. It is shown that the degree of microscopic chemical heterogeneity in the joints remains nearly constant throughout a wide range of cooling rates and variations in acicular crystallite sizes. The degree of liquation of

UDC: 621.791.053 : 620.192.3

Card 1/2

MAKARA, A.M.; ISKRA, A.S.; YEGOROVA, S.V.; YUNGER, S.V.; GORKUNENKO, [illegible] N.; NIKUYKO, N.A.; ZANDBERG, S.A.; BRONSHTEYN, L.M.

Technology of electric slay welding of petroleum refining and chemical apparatus without normalization. Avtom. svar. 18 no.5:11-16 My '65. (MIRA 18:6)

1. Institut elektrosvarki im. Ye.O. Patona AN UkrSSR (for Makara, Iskra, Yegorova). 2. VPTIkhimnefteapparatury (for Yunger, Gorkunenko, Nikuyko). 3. Volgogradskiy zavod im. Petrova (for Zandberg, Bronshteyn).

MOSENDZ, N.A.; MAKARA, A.M.

Effect of the composition of flux on the content of sulfur and oxygen in the seam metal. Avtom.svar. 18 no.1:38-42 Ja '65. (MIRA 18:3)

1. Institut elektrosvarki im. Ye.O.Patona AN UkrSSR.

L 20103-65
ACCESSION NR: AP4045454

ENCLOSURE: 01

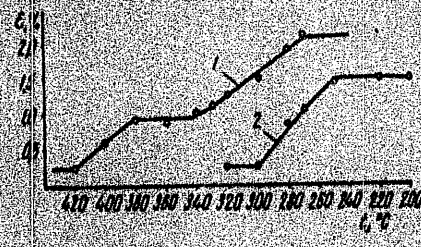


fig. 1

Plastic deformation under the action of stress application according to the type of joints with (1) an austenitic weld and (2) a ferritetic-pearlitic weld

Card 4/4

L 20103-65
ACCESSION NR: AP4045454

ASSOCIATION: Institut elektrosvarki imeni Ye. O. Patona AN UkrSSR (Institute of Electric Welding AN UkrSSR)

SUBMITTED: 27Jun64 ENCL: 01

SUB CODE: MM NO REF SOV: 010 OTHER: 006

Card 3/4

temperature of 500 C. These stresses intensified the austenite transformation at high temperatures. The initial stage of austenite transformation in the weld area shifts from the martensite region into the bainite region resulting in better structure and improved quality. The effect of the chemical composition and the metal structure of the joint on cold cracking strength is attributed to the physical properties of the joint metal and the structural transformations which affect the process of deformation in the weld area and, consequently, the kinetics of austenite transformation the bainite and martensite regions. Under the action of ~10 kgG/mm^2 stresses at the initial stage of bainite and martensite transformation in 35Kh3N3M steel under conditions of continuous cooling plastic deformation is highly developed. It follows that welding stresses are somewhat lowered which also enhances cracking strength. The authors propose a method of predetermined deformation during cooling to increase the resistance to cold cracking. A further study is suggested with a view of investigating the effect of deformation on austenite transformation in a great variety of alloy steels and under different welding conditions. Orig. art. has: 7 figures and 2 tables

L 20103-65 EWT(m)/EWP(w)/EWA(d)/T/EWP(t)/EWP(b) ASD(m)-3 MJW/JD
ACCESSION NR: AP4045454 S/0125/64/000/009/0001/0010

AUTHOR: Makara, A. M. (Doctor of technical sciences); Mosendz, N. A. (Engineer)

TITLE: The nature of the effect of a metal joint on crackformation in the welding area

SOURCE: Avtomaticheskaya svarka, no. 9, 1964, 1-10

TOPIC TAGS: metal joint, austenite transformation, bainite, martensite, cold crack plastic deformation

ABSTRACT: The authors discuss numerous papers dealing with the effect of the weld seam on crack formation. They developed a method of testing the joints for resistance to cold cracking by the application of tensile stresses to ferritic-pearlitic, bainite-martensitic and austenitic butt joints during the cooling off period. It was found that the difference between the maxima and minima stresses did not exceed 25% in the individual spots. A special series of tests was conducted to investigate deformation in the joint area of butt-welded 35Kh3N3M steel plates, δ=12mm. The resistance to cold cracking was substantially enhanced in all specimens by the formation of stresses in excess of 10 kgG/mm^2 at a maximum

Card 1/4

MAKARA, A.M.; MOSENDZ, N.A.; SIDORETS, N.M.; KOSTYUCHENKO, V.A.

Welding centrifugal [illegible]
a thickness of 32mm. Avtom. [illegible] no. 89 [illegible]

L 39986-65

ACCESSION NR: AT5008307

ASSOCIATION: Institut elektrosvarki im. Ye. O. Patona AN UkrSSR (Ukrainian Welding Institute)

SUBMITTED: 25Dec64 ENCL: 00 SUB CODE: MM, IE

NO REF SOV: 017 OTHER: 000 ATD PRESS: 3229

Card 1/1 MB

content in the weld metal and a higher resistance to hot cracking has been achieved with the use of low-silicon fluxes of the AN-15 or AN-15M type. An additional means of preventing hot cracking of welds in steel plates is alloying of the weld metal. Thus, by using OKh4M electrode wire, an AN-15 type flux, and suitable welding conditions, high-quality welds with a tensile strength of 145 kg/mm^2 and a notch toughness of 6 kgm/cm^2 were obtained. The most promising directions of the research in welding of superstrength steels include flash welding of large parts and electron-beam welding. These methods would ensure a strength of 200—220 kg/mm^2. Further increase can be obtained by a thermomechanical treatment of the parent metal either before or after welding. Welding of prestrengthened steel presents a complex problem. A solution can probably be found by combining the maximum possible mechanical strengthening with flash, electron-beam, or laser welding, and by improved joint design. With thermomechanical treatment applied after welding, the weld must respond to treatment the same way as the parent metal. Orig. art. has: 2 figures and 3 tables. [MS]

of the base metal. In argon shielded-arc welding of 2-mm thick 38Kh3SNVFMA steel sheets, the single-pass weld contained 0.03—0.04% less carbon but was stronger than the parent metal. On the other hand, in electroslag welding of 100-mm thick 30Kh2GSNVMA steel plate and 90-mm thick 30KhGSN steel plate, the loss of carbon was 0.05—0.02% and that of silicon manganese, chromium, and tungsten, 0.1—2.0%, and the strength, ductility, and notch toughness of the welds was lower than the parent metal. The high strength of the welds in thin steel sheets is a result of high chemical homogeneity, additional alloying, and a high density of dislocations, all of which are brought about by rapid crystallization. A low content of sulfur, phosphorus, gases, and nonmetallic inclusions in the parent metal is a most important factor in achieving weld strength equal to that of the parent metal. The upper limit of 0.04 for sulfur and phosphorus, which is acceptable for ordinary structural steels, is inadmissible for high-strength thin-sheet steels. No reliable method has yet been developed for mechanized arc welding of high-strength steel plates 10—30 mm thick, which would ensure a joint strength equal to that of the parent metal, i.e., more than 150 kg/mm². Another problem in welding superstrength sheets is hot cracking. A substantial reduction in the sulfur

L 39286-65 EWP(k)/EWP(z)/EWA(c)/EWT(d)/EWT(m)/EWP(b)/T/EWA(d)/EWP(w)/EWP(t)
PF-4 EM/WW/JD/EJ/GS

ACCESSION NR: AT5008307 S/0000/64/000/000/0247/0265

AUTHOR: Makara, A. M. (Candidate of technical sciences)

TITLE: Welded joints in high-strength steels

SOURCE: AN UkrSSR, Institut elektrosvarki. Novyye problemy svarochnoy tekhniki (New problems in welding technology). Kiev, Izd-vo Tekhnika, 1964, 247-265

TOPIC TAGS: superstrength steel, complex alloy steel, steel welding, MIG welding, electroslag welding, sheet welding, plate welding

ABSTRACT: An analysis is presented of the results of a systematic investigation carried out at the Electric Welding Institute during 1959—1963 of the weldability of recently developed superstrength, complex-alloy steels of the 30KhGSNA or 40KhNVFMA type. Such steels contain up to 5—7% of the alloying elements and from 0.28 to 0.45%C, and are heat treated to a tensile strength of 160—200 kg/mm^2. The main purpose of the investigation was to determine the welding methods and conditions which would ensure a weld strength equal to that

Card 1/4

MAKARA, A.M.; YAGUPOL'SKAYA, L.N.; SLUTSKAYA, T.M.; KOP'YEV, M.I.; USHAKOV, I.S.; SMIRNOVA, V.A.

Resistance to hydrogen corrosion in alloyed steel joints made by electric slag welding. Avtom. svar. 16 no.6:24-29 Je '63. (MIRA 16:7)

1. Institut elektrosvarki im. Ye.O.Patona AN UkrSSR (for Makara, Yagupol'skaya, Slutskaya). 2. Gosudarstvennyy institut azotnoy promyshlennosti (for Kop'yev, Ushakov, Smirnova).
(Steel alloys--Corrosion) (Electric welding)

grades of steel, such as МСт .3 (MSt.3) 22K, 25 Л (25L), 35 Л (35L), 16ГТ(3Н) (16GT(3N), 12 ГТ(М) (12GT(M), 20 ГСЛ (20GSL), 08 ГДНФЛ (08GDNFL); these data and the experimental operation of various structures having such joints, show the possibility of using this new method for different parts, e.g. coatings of ship hulls (up to 30 mm thick) forging-press frames, cement furnace shells and bandages, etc. In electric-slag welding, defects such as poor welding, cracks, slag inclusions, are prevented more reliably than in arc welding; as a result the operational efficiency of the parts is increased, and there is less danger of brittle failure for the welded structures.

ASSOCIATION: Institut elektrosvarki imeni Ye. O. Patona, AN USSR (Institute of Electric Welding imeni Ye. O. Paton, AS UkrSSR)

SUBMITTED: September 28, 1962

S/125/63/000/002/001/010
A006/A101

AUTHORS: Sterenbogen, Yu. A., Makara, A. M.

TITLE: On the possibility of renouncing normalization of structures produced with the aid of electric-slag welding

PERIODICAL: Avtomaticheskaya svarka, no. 2, 1963, 10 - 16

TEXT: The authors present data of investigations on the operational capacities of electric-slag welded structures. It is established that these capacities do not only depend upon the toughness of the parts, but upon a combined effect of factors, such as low operational temperatures; increased sensitivity to embrittlement of the base metal and the welded joint; stress concentrators, etc. Investigations carried out at TsNIITS have shown that in spite of a lower toughness of electric-slag welded joints against manually welded carbon steel joints, the former showed a lesser sensitivity to embrittlement. The investigation was made to show the possibility of renouncing normalizing of electric-slag welded joints in ship parts, such as ship stems, rudder parts etc. Series data on the quality of electric-slag welded joints which were not normalized, have been obtained for various

Card 1/2

section 5 and 20. The part on methods of determining the temperature of transition to brittle behavior in section 6 is the work of V. V. Shevernitskiy, Candidate of Technical Sciences. Section 10 was written by A. Ye. Asnis, Candidate of Technical Sciences. I. K. Pokhodnya, Candidate of Technical Sciences, wrote section 12 and Chapter IX, while section 13 and Chapter XI were written by V. V. Podgayetskiy, Candidate of Technical Sciences. Chapter V is the joint effort of B. Ye. Paton and M. G. Bel'fer, Engineer. S. L. Mandel'berg, Candidate of Technical Sciences, is author of Chapter VI and section 19. Section 21 was written by B. I. Medovar, Doctor of Technical Sciences, and section 22 by Rabkin. Section 23 is the work of Yu. V. Latash, Candidate of Technical Sciences, while Chapter X was written by I. V. Kirdo, Candidate of Technical Sciences. The authors thank Doctors of Technical Sciences N. O. Okerblom and G. A. Nikolayev, respective heads of the reviewing departments, for their valuable comments. There are 31 references, all Soviet.

COVERAGE: The book reviews the basic principles of the technology of electric fusion welding of various metals and their alloys. Classification of welding processes and comparative characteristics of mechanized and manual welding methods are presented. Weldability problems and causes of defects in welded joints are discussed. Information on materials, equipment, and conditions of welding and surfacing of various metals, alloys, and structures is given. Brief information on the use of heat sources employed in special types of welding and on safety precautions is also given. The Introduction, Chapter I (except the part headed "Arc Welding" in section 1), Chapter II (except the part headed "Cold Cracks" in section 5, the part on methods of determining resistance to brittleness in sections 6, 7, 8, 9, 11, and 14) are the work of S. A. Ostrovskaya, Candidate of Technical Sciences. The part entitled "Welding Arc" in paragraph 1 was written by Ostrovskaya in cooperation with D. M. Rabkin, Candidate of Technical Sciences. A. M. Makara, Candidate of Technical Sciences, wrote the parts entitled "Cold Cracks" in

Makara A.M

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Paton, B. Ye., Lenin Prize Winner, Academician, ed.

Tekhnologiya elektricheskoy svarki plavleniyem (Technology of Electric Fusion Welding) Moskva, Mashgiz (Southern Dept.), 1962. 663 p. Errata slip inserted. 25,000 copies printed.

Ed.: M. S. Soroka; Tech. Ed.: M. S. Gornostaypol'skaya; Chief Ed.: V. K. Serdyuk, Engineer.

Review: Department of Welding, Leningrad Polytechnic Institute; and Department of Welding, Moscow Higher Technical Institute imeni Bauman.

PURPOSE: This handbook is intended for students of schools of higher education who specialize in welding. It may also be used by engineering personnel of scientific research organizations and plants.

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S/125/62/000/006/012/013
Welding problems at the International Scientific D040/D113

ASSOCIATION: Ordena Trudovogo Krasnogo Znameni Institut elektrosvarki im. Ye.O.Patona AN USSR (Electric Welding Institute "Order of the Red Banner of Labor" im. Ye.O.Paton, AS UkrSSR) (Makara, A.M.); Moskovskiy nauchno-issledovatel'skiy institut khimicheskogo mashinostroyeniya (Moscow Scientific Research Institute of Chemical Machinery) (Toropov, V.A.)

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Welding problems at the International Scientific .....

development of welding techniques"; K.Kapral (ČSSR), "Progressive methods of the technological preparation of production"; J.Vrdlový (ČSSR), "A new technology for producing modern machines and equipment"; Z.Faludi (Hungary), "A method of technically and economically planning technological development"; Toropov (USSR), "The present state and problems of welding in chemical machinery"; V.Hora (ČSSR), "The prospective development of modern methods in the production of chemical equipment", reference being made to a new high-pressure vessel designed at the Královo Pole Plant; L. Zawitnewicz (Poland), "Automatic welding equipment used for submerged arc welding of 1.5-4 mm thick sheets"; A.Zawitnewicz, Engineer, read a report describing welding of thin metal, and a special welding line equipped with AS8-600 motorized welders produced by the Welding Institute in Gliwice. Reference is made to a welding method and a flux developed by the Institut elektrosvarki im. Ye.O.Patona (Electric Welding Institute im. Ye.O.Paton) and now used in the ČSSR.

S/125/62/000/006/012/013
D040/D113

AUTHORS: Makara, A.M., and Teropov, V.A.

TITLE: Welding problems at the International Scientific and Technical Conference of Machine-Building Technologists

PERIODICAL: Avtomaticheskaya svarka, no. 6, 1962, 88-94

TEXT: The Sovet ekonomicheskoy vzaimopomoshchi (Council of Economic Mutual Assistance)-SEV convened the Mezhdunarodnaya nauchno-tekhnicheskaya konferentsiya tekhnologov-mashinostroiteley (International Scientific and Technical Conference of Machine-Building Technologists) in Prague in late 1961. Experience was exchanged and means of speeding up the industrial application of modern technology discussed. Detailed information on the Welding Institute in Bratislava and the Institute of Welding Equipment and Technology in Prague, including the equipment and methods used there, is given. Both institutes were visited by Soviet delegates after the conference. The following reports were heard: V.N.Zubko (USSR), "The development of progressive technology in heavy machine-building on the basis of specialized production"; Makara (USSR), "The state and trends of

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OSTROVSKIY, S.A., kand. tekhn. nauk; RABKIN, D.M., kand. tekhn. nauk; MAKARA, A.M., kand. tekhn. nauk; SHEVERNITSKIY, V.V., kand. tekhn. nauk; ASNIS, A.Ye., kand. tekhn.nauk; POKHODNE, I.K., kand.tekhn. nauk; PODGAYETSKIY, V.V., kand.tekhn.nauk; PATON,B.Ye., laureat Leninskoy premii, akademik, doktor tekhn. nauk; BEL'FER,M.G., inzh.; MANDEL'BERG,S.L., kand.tekhn.nauk; MEDOVAR,B.I., doktor tekhn.nauk; GUREVICH,S.M., kand.tekhn.nauk; LATASH,Yu.V., kand.tekhn.nauk; KIRDO, I.V., kand.tekhn.nauk; SOROKA,M.S., red.; GORNOSTAYPOL'SKAYA, M.S., tekhn.red.

[Technology of electric fusion welding]Tekhnologiia elektricheskoi svarki plavleniem. Moskva, Mashgiz, 1962. 663 p. (MIRA 15:12)

1. Nauchnyye sotrudniki Instituta elektrosvarki imeni Ye.O.Patona (for all except Soroka, Gornostaypol'skaya).
(Electric welding)

Determining the development of cold cracks in...

in specimens subjected to a tension stress of 20 - 25 kg/mm^2 initiated as all other and spread slowly for several hours, then developed instantaneously to complete failure of specimen. The conclusion is drawn that the method is suitable for studying the kinetics of slow destruction in welded joints as well as in metals in general, e.g., the initiation and spreading of hardening cracks that are forming slowly after heat treatment. There are 11 figures and 5 references: 4 Soviet-bloc and 1 non-Soviet-bloc. The reference to the English-language publication reads as follows: A. N. Cottrell, A Note on the Initiation of Hardened Zone Cracks, "The Welding Journal", no. 11, 1944.

ASSOCIATION: Ordena Trudovogo Krasnogo Znameni Institut elektrosvarki im. Ye. O. Patona AN USSR ("Order of the Red Banner of Labor" Electric Welding Institute im. Ye. O. Paton AS UkrSSR)

SUBMITTED: January 28, 1961

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Determining the development of cold cracks in...

ultrasonic energy on the screen. However, vertical internal cracks in metal do not produce such an effect, and it was not possible to watch and record slight increases of cracks of this kind. It is emphasized that also other flaws than cracks (cold shuts, notches) are being reflected, and preparatory experiments are necessary with specimens of the chosen geometric shape to spot and determine the other reflections before the tests. The length of cracks is determined as usual in such flaw detection, i.e. by two positions of the feeler being moved to and fro. The depth of cracks was judged by the changing amplitude of reflected signal. The amplification was correspondingly reduced, for otherwise the signals would reach beyond the screen. A graph was plotted by which the depth of cracks may be determined with ±0.5 mm accuracy. Error is highest at about 1 mm crack depth. At low crack depths the accuracy increases to ±0.2 mm. Reflections from notches were different from reflections from cracks. The data show that initial microscopic cracks are starting at both ends of the seam at the boundary with the base metal in 20 - 25 min after termination of welding, when the metal temperature is about 140 - 130°C, and the depth of initial cracks is below one millimeter. The number of initial cracks reached up to ten in 3 hrs. The crack propagation was different - some cracks remained stable for a long time and then propagated rapidly, and some vice versa. Only in 2 - 3 days cracks became visible to unaided eye. Cracks

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AUTHORS: Makara, A. M., Tsechal', V. A., Zhovnitskiy, I. P.

TITLE: Determining the development of cold cracks in welded joints by ultrasonic flaw detection

PERIODICAL: Avtomaticheskaya svarka, no. 5, 1961, 3 - 10

TEXT: A new method developed by the Institut elektrosvarki im. Ye. O. Patona (Electric Welding Institute im. Ye. O. Paton) makes it possible to determine the moment of crack initiation and their further propagation in welds. An УЗД-7Н (UZD-7N) ultrasonic flaw detector of TsNIITMASh design was used. The investigations were conducted with h-f oscillations of 2.5 Mc, with prismatic feelers producing a 30° sound beam angle, one feeler performing the functions of both transmitter and receiver. Silicon oil was used on the specimen surface, which ensured a dependable contact at temperatures about 150°C. Butt welds were prepared in 14 mm thick 35ХЗНЗМ (35Kh3N3M) medium-alloyed steel with straight edges and single-bead welds. The shape was chosen for convenience, for cold cracks in such welds usually develope at about right angles to the surface, and the reflection is clear. Already a slight increase of a crack caused a noticeable change in the reflected

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COVERAGE: The collection contains abridged reports presented and discussed at the Twelfth Annual Assembly of the International Institute of Welding. Reports deal with problems of welding and related processes used in repair work, repair techniques, and the problems arising in connection with the nature of the base and filler materials. Examples of repairing various parts are given, and the organization of repair operations in workshops and under field conditions is discussed. Economic aspects of welding and related processes as used in repair work are analyzed. No personalities are mentioned. There are no references.

TABLE OF CONTENTS: [Only Soviet and Soviet-bloc reports are given here]

MAKARA, A.M.

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International Institute of Welding

XII kongress Mezhdunarodnogo instituta svarki, 29 iyunya - 5 iyulya 1959 v g. Opatii (Twelfth Annual Assembly of the International Institute of Welding, Opatija, June 29 - July 5, 1959) Moscow, Mashgiz, 1961. 359 p. 3000 copies printed.

Sponsoring Agency: Natsional'nyy komitet SSSR po svarke.

Ed. (Title page): G. A. Maslov, Docent; Translated from English, French, and Serbo-Croatian by N. S. Aborenkova, K. N. Belyayev, E. P. Bogacheva, L. A. Borisova, K. V. Zvegintseva, V. S. Minavichev, and M. M. Shelechnik; Managing Ed. for Literature on the Hot-Working of Metals: S. Ya. Golovin, Engineer.

PURPOSE: This collection of articles is intended for welding specialists and the technical personnel of various production and repair shops.

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MALEVSKIY, Yuzef Boleslavovich; GRABIN, Vladimir Fedorovich; DAROVSKIY, Georgiy Fedos'yevich; PARFESSA, Galina Ivanovna; ROSSOSHINSKIY, A.A., kand.tekhn.nauk, retsenzent; MAKARA, A.M., kand.tekhn.nauk, red.; RIKBERG, D.B., red.; GORNOSTAYPOL'SKAYA, M.S., tekhn.red.

[Atlas of the micro- and macrostructure of welded joints] Atlas makro- i mikrostruktur svarnykh soedinenii. Pod red. A.M.Makara. Moskva, Gos.nauchno-tekhn.izd-vo mashinostroit.lit-ry, 1961. 118 p. (MIRA 15:2)
(Welding--Testing) (Metallography)